Statistical Bulletin

METROPOLITAN LIFE INSURANCE COMPANY

Volume 38 December 1957

Record Population Growth in United States and Canada

BOTH the United States and Canada scored record population gains in 1957. In the United States the increase exceeded 3,000,000 for the second year in a row, raising the total population, including the Armed Forces overseas, to 172,830,000 at the end of the year. In the 7¾ years since the 1950 Census 21.7 million people have been added to the population, an increase of 1.7 percent annually. Canada has been experiencing a much higher rate of growth, the population having increased by 2.9 percent a year since the June 1951 Census. At the close of 1957, Canada's population reached 16,900,000, an increment of about 556,000 during the year and of almost 2,900,000 since June 1951.

The rapid growth of population in the United States during recent years reflects largely the continuing baby boom. Births have established new high records for seven successive years. There were somewhat over 4,300,000 babies born in 1957, compared with about 4,220,000 the year before and 4,104,000 in 1955. The births in 1957 correspond to a rate of 25.3 per 1,000 population in the United States.

The babies born in 1957 had a good start in life. Infant mortality in the United States remained close to the all-time low level established the year before. There were about 26.3 infant deaths for every 1,000 live births, compared with 26.1 in 1956. Even with the small setback in the year just ended, the rate is about 20 percent lower than it was a decade ago and more than 50 percent below that of two decades ago.

The general mortality in the United States increased moderately during 1957, for the third successive year. The death rate for the total population was 9.6 per 1,000, compared with 9.4 in 1956 and with the record low of 9.2 in 1954. Deaths rose by 65,000 in 1957 to a new high of about 1,630,000. Part of the upswing in mortality during recent years is accounted for by increases in the proportion of older persons in the population. However, of equal importance in 1957 was the widespread outbreak of Asian influenza. In sharp con-

TABLE 1—POPULATION, UNITED STATES BY GEOGRAPHIC AREA, 1950-1958

Area	Number in Thousands			Annual Percent Increase† During	
	January 1, 1958	January 1, 1957	April 1, 1950	1957	April 1950 to January 1957*
UNITED STATES					
Including Armed Forces overseas	172,830	169,820	151,132	1.8	1.7
Excluding Armed Forces overseas	172,000	168,930	150,697	1.8	1.7
New England	9,919	9,808	9,314	1.1	.8
Maine	945	936	914	1.0	.4
New Hampshire	576	568	533	1.4	.9
Vermont	376	374	378	.5	— .2
Massachusetts	4,880	4,839	4,691	.8	.5
Rhode Island	866	854	792	1.4	1.1
Connecticut	2,276	2,237	2,007	1.7	1.6
Middle Atlantic	32,798	32,447	30,164	1.1	1.1
New York	16,000	15,872	14,830	.8	1.0
New Jersey	5,695	5,574	4,835	2.2	2.1
Pennsylvania	11,103	11,001	10,498	.9	.7
East North Central	35,456	34,724	30,399	2.1	2.0
Ohio	9,318	9,142	7,947	1.9	2.1
Indiana	4,586	4,487	3,934	2.2	2.0
Illinois	9,727	9,570	8,712	1.6	1.4
Michigan	7,925	7,697	6,372	3.0	2.8
Wisconsin	3,900	3,828	3,435	1.9	1.6
West North Central	15,418	15,203	14,061	1.4	1.2
Minnesota	3,351	3,293	2,982	1.8	1.5
Iowa	2,815	2,778	2,621	1.3	.9
Missouri	4,283	4,229	3,955	1.3	1.0
North Dakota	646	643	620	.5	.6
South Dakota	706	698	653	1.1	1.0
Nebraska	1,462	1,440	1,326	1.5	1.2
Kansas	2,155	2,122	1,905	1.6	1.6
South Atlantic	24,946	24,391	21,182	2.3	2.1
Delaware	447	428	318	4.4	4.5
Maryland	2,938	2,864	2,343	2.6	3.0
District of Columbia	833	832	802	.1	.5
Virginia	3,829	3,755	3,319	2.0	1.9
West Virginia	1,975	1,972	2,006	.2	— .3
North Carolina	4,531	4,455	4,062	1.7	1.4
South Carolina	2,389	2,348	2,117	1.7	1.6
Georgia	3,805	3,745	3,445	1.6	1.3
Florida	4,199	3,992	2,771	5.2	5.6
East South Central	11,877	11,772	11,477	.9	.4
Kentucky	3,049	3,017	2,945	1.1	.4
Tennessee	3,480	3,444	3,292	1.0	.7
Alabama	3,161	3,139	3,062	.7	.4
Mississippi	2,187	2,172	2,179	.7	— .1
West South Central	16,400	16,116	14,538	1.8	1.5
Arkansas	1,757	1,765	1,910	— .5	—1.2
Louisiana	3,103	3,041	2,684	2.0	1.9
Oklahoma	2,280	2,262	2,233	.8	.2
Texas	9,260	9,048	7,711	2.3	2.4
Mountain	6,479	6,299	5,075	2.9	3.3
Montana	672	659	591	2.0	1.6
Idaho	644	633	589	1.7	1.1
Wyoming	318	319	291	— .3	1.4
Colorado	1,698	1,657	1,325	2.5	3.4
New Mexico	842	821	681	2.6	2.8
Arizona	1,166	1,111	750	5.0	6.0
Utah	864	838	689	3.1	3.0
Nevada	275	261	160	5.4	7.5
Pacific	18,707	18,170	14,487	3.0	3.4
Washington	2,749	2,703	2,379	1.7	1.9
Oregon	1,788	1,752	1,521	2.1	2.1
California	14,170	13,715	10,586	3.3	3.9

*Geometric average annual rate. †Minus sign (—) denotes decrease.

Note: Figures for divisions and States exclude population in the Armed Forces overseas. Each 1950 figure has been independently rounded; hence, the sums of parts may differ slightly from the totals.

Source: Data for April 1, 1950, from the decennial census; those for January 1 of 1957 and 1958, estimated by the Statistical Bureau of the Metropolitan Life Insurance Company from data published by the Bureau of the Census and the National Office of Vital Statistics.

trast to the influenza pandemic of 1918-19, the current outbreak was relatively mild and fatalities were limited largely to persons past age 55. The influenza epidemic also had the effect of raising the mortality from diseases of the heart and arteries.

The natural increase in population—the excess of births over deaths—amounted to about 2,680,000 in 1957. This was somewhat above the previous maximum recorded the year before. The United States also gained about 330,000 persons through migration, or several thousand less than in 1956.

Every geographic division of the United States shared in the growth of population during 1957, but not in equal measure. The Pacific States continued to experience the largest rate of increase, namely, 3.0 percent. This was two thirds above the national rate, and not much below the Far West's annual rate of increase for 1950-56. Since April 1950 California alone has added almost 3.6 million inhabitants.

The Mountain States have also been growing rapidly, as is evident from Table 1. In fact, Nevada and Arizona outrank all other States in the rate of population increase. Four States outside the West have also been growing at a rapid pace. Since 1950 the annual population gain has exceeded 5 percent in Florida and has averaged about 4½ percent in Delaware; in Maryland and Michigan it has been close to 3 percent annually.

Three States had fewer residents at the end of 1957 than in April 1950. The population has declined by 150,000 in Arkansas and by about 30,000 in West Virginia; Vermont has had a slight decrease.

The unprecedented increase during 1957 in the Canadian population resulted for the most part from a record excess of births over deaths. Canadian births rose by 24,000 to a new high of about 475,000 in 1957; the rate was 28.5 per 1,000 population. The number of deaths totaled about 137,000. The death rate was 8.2 per 1,000 population, the same as in the two preceding years and only a shade above the all-time low of 8.1 registered in 1954. Canada also had an unusually large gain through migration in 1957—more than 200,000. This was double the number in 1956, and accounted for two fifths of the total population growth in the year.

Ontario and Quebec, the two largest Provinces in Canada, continued to grow rapidly in 1957. In fact, the population of Ontario increased by more than 4 percent, reaching 5¾ million at the end of the year (Table 2 on page 4). The rate of growth was even greater on the Pacific Coast, the population of British Columbia increasing by 6.4 percent. At the other extreme, there was little or no population change during 1957 in Prince Edward Island, Saskatchewan, the Yukon and Northwest Territories.

TABLE 2—POPULATION, CANADA BY PROVINCE, 1951-1958

Province	Number in Thousands				Annual Percent Increase During	
	January 1, 1958	January 1, 1957	June 1, 1956	June 1, 1951	1957	June 1951 to January 1957*
CANADA	16,900	16,344	16,081	14,009	3.4	2.8
Newfoundland	433	421	415	361	2.9	2.8
Prince Edward Island	99	99	99	98	—	.1
Nova Scotia	706	698	695	643	1.1	1.5
New Brunswick	572	560	555	516	2.1	1.5
Quebec	4,838	4,694	4,628	4,056	3.1	2.7
Ontario	5,752	5,520	5,405	4,598	4.2	3.3
Manitoba	866	854	850	777	1.4	1.7
Saskatchewan	879	878	881	832	.1	1.0
Alberta	1,184	1,142	1,123	940	3.7	3.6
British Columbia	1,540	1,447	1,398	1,165	6.4	4.0
Yukon and Northwest Territories	31	31	32	25	—	3.9

*Geometric average annual rate.

Note: Each figure for 1951 and 1956 has been independently rounded; hence, the sums of parts may differ slightly from the totals.

Source: Data for June 1 of 1951 and 1956, from the quinquennial censuses; those for January 1 of 1957 and 1958, estimated by the Statistical Bureau of the Metropolitan Life Insurance Company from data published by the Dominion Bureau of Statistics.

●

Fewer Accidental Deaths in 1957

ACCIDENTS took an estimated total of about 94,000 lives in the United States during 1957, or somewhat fewer than in 1956. It was the first time in three years that the number of fatally injured showed a reduction. The total increased from 90,000 in 1954 to little short of 93,500 in 1955, and further to 95,000 the following year. Provisional figures indicate that the accident death rate in 1957 was 55 per 100,000 population, or about on the level with the all-time low recorded in 1954.

Motor vehicle accidents accounted for approximately 38,500 fatalities in 1957. Although this is about 1,000 below the toll in the preceding year, it is still one of the highest on record. Motor vehicles continue to be the leading cause of fatal injuries by a considerable margin, accounting for about two fifths of all accidental deaths. There is some encouragement, however, to be gained from the preliminary data available for 1957,

which indicate that for the first time in three years the annual death rate per 100 million vehicle miles showed a decline.

Fatal injuries sustained in and about the home also showed a reduction of about 500 from the year before, the number killed in such accidents in 1957 totaling 27,000. On the other hand, fatalities in public accidents, other than those involving motor vehicles, increased to about 16,500, or about 500 more than in 1956. Accidents arising out of and in the course of employment were responsible for about 14,500 deaths in 1957, of which approximately 3,000 involved a motor vehicle.*

Catastrophes—accidents in which five or more persons are killed—accounted for nearly 1,700 deaths during 1957, about 400 more than in the year before. The increase reflects largely the unusually heavy loss of life caused by Audrey, the June hurricane which struck the coast of Louisiana and eastern Texas, and then veered northward. The storm left in its path approxi-

*These 3,000 deaths are also included in the total figure for motor vehicle accidents.

●

ACCIDENTS TAKING 25 OR MORE LIVES, IN ORDER OF IMPORTANCE

United States, 1955-1957

Date	Place	Type of Accident	Number of Lives Lost
		1957	
June 27-28	Louisiana, Texas, and several other States	Hurricane and floods	350*
February 17	Warrenton, Mo.	Fire destroyed home for the aged	72
May 20	Kansas City area	Tornado	39
February 4	Near Bishop, Va.	Gas explosion in coal mine	37
March 22-25	Great Plains States	Blizzard	29
		1956	
June 30	Over Grand Canyon, Ariz.	Two scheduled passenger airplanes collided	128
July 13	Fort Dix, N. J.	Military plane crash	46
February 17	Near Oakland, Calif.	Military plane crash	40
January 22	Los Angeles, Calif.	Passenger train derailed	30
April 15	Near Birmingham, Ala.	Tornado	25
		1955	
August 17-19	Northeastern United States	Hurricane and floods	180
May 25	Kansas,† Oklahoma, Texas, and Missouri.	Series of tornadoes	115
December 22-27	California and Oregon	Floods	84
October 6	Near Laramie, Wyo.	Scheduled passenger plane crash	66
October 14-16	Northeastern United States	Floods	48
August 4	Near Newburg, Mo.	Scheduled passenger plane crash	30
February 12	Chicago, Ill.	Fire swept hotel	29
November 18	Seattle, Wash.	Nonscheduled passenger plane crash	28
August 12-14	Maryland, New Jersey, Pennsylvania	Hurricane	25

*Known dead.
†80 lives lost in Udall area.
Note: Figures for natural disasters are approximate.

mately 350 known dead, most of them in the fishing village of Cameron, La. All five of the major catastrophes—those which caused at least 25 deaths—occurred in the first six months of the year. In addition to the hurricane, two other natural disasters were experienced. In late March a blizzard swept through the Great Plains States, taking 29 lives, and on May 20 a tornado struck the Kansas City area, killing 39 persons. The fire which destroyed a home for the aged at Warrenton, Mo., on February 17—the second largest disaster of the year—was responsible for 72 fatalities. A gas explosion in a coal mine near Bishop, Va., on February 4 caused 37 deaths. Thus, the five major catastrophes together accounted for more than 500 deaths. Although there were the same number of accidents involving at least 25 deaths in 1956, the toll was appreciably smaller—about 270 fatalities; in 1955 nine major accidents occurred, killing more than 600 persons. Details regarding the major catastrophes which occurred during 1955-57 are summarized in the table on page 5.

Natural disasters in the year just ended were responsible for more than one third of all the lives lost in accidents in which five or more persons were killed. Motor vehicle accidents ranked second in this respect, accounting for more than one quarter of the fatalities. Fires and explosions caused one fifth of the total. Military aviation, civil aviation, and water transportation each contributed a much smaller proportion.

Because of the heavy toll in the June hurricane, the loss of life in natural disasters was the highest in nearly two decades. Catastrophes involving motor vehicle mishaps and fires and explosions also took higher death tolls this year than last. On the other hand, fatalities in civil and military aviation, and railroad transportation were materially lower in 1957 than in 1956. The loss of life in water transportation remained about the same.

Influenza: Recent and Long-Term Trends

ASIAN influenza first appeared in the Far East during the spring of 1957 and spread to many other areas of the world, reaching the United States in August. The disease began to attain epidemic proportions here in late summer and recorded its maximum incidence in mid-autumn. Data collected by the Public Health Service indicate that the peak was reached in the week ending November 2d, when 1,250,000 new cases are estimated to have occurred. The outbreak then subsided rapidly, new cases of the disease continuing to decrease in number to the end of the year. The Public Health Service

estimates that approximately 20 million cases of Asian influenza occurred in the United States from September through December. It is difficult to ascertain with any certainty the incidence of the disease on a national basis because influenza is not reportable in large areas of the country, and an accurate diagnosis is established in relatively few cases.

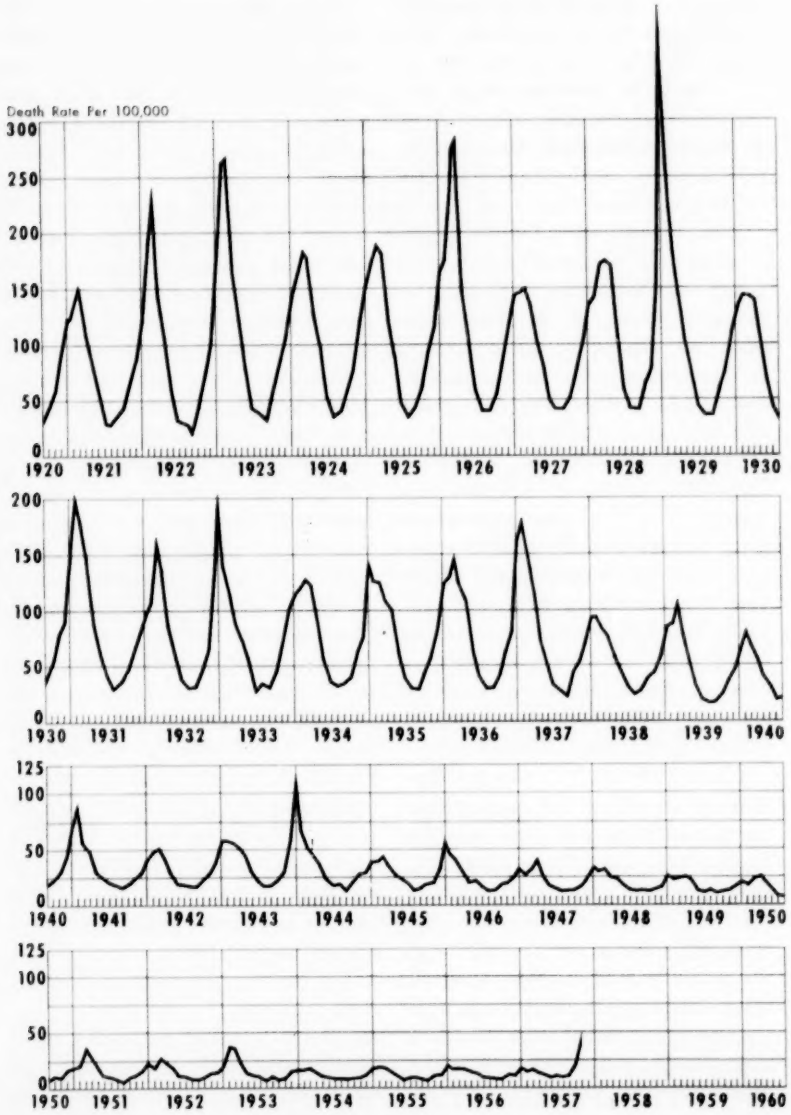
The course of the epidemic through the Northern Hemisphere is reflected in the morbidity statistics of our Army. First to be struck were our troops in the Far East. In June, American Army personnel in Japan experienced a sharp rise in the frequency of common respiratory diseases, including influenza. Among our soldiers stationed in Korea, the high point came in July and exceeded that recorded in Japan the month before. Our Army units in Europe began to feel the impact of the outbreak in August, but the frequency of cases continued to rise until October, paralleling the experience of troops in continental United States.

Toward the end of October another outbreak of influenza struck our forces in the Far East, as it did the general population in that area; like the first, it has not been virulent. By early November the case rate among our troops there was actually higher than the peak recorded during the first wave. This recurrence, coupled with the fact that the highest incidence of the disease in our country usually occurs during February and March, indicates the possibility of a recurrent wave here early in 1958.

Although the outbreak this year has affected large areas and huge numbers of people throughout the world, it differs radically from the pandemic of 1918. In the present epidemic, fatalities have been largely concentrated among older people and, to a lesser extent, among the very young, whereas in the 1918 pandemic the greatest mortality occurred in early adult life. Another significant point of difference is that the case fatality rate in the present outbreak is low. At the height of the 1918 pandemic, more than 50 percent of all deaths in the country's large cities were ascribed to pneumonia and influenza; in sharp contrast, the corresponding proportion was only about 7 percent in early November of 1957. Similarly, the impact of the epidemic on the total death rate has been much less this year than it was in 1918. The mortality from all causes combined in 1957 is expected to be only about 2 percent higher than that in 1956—reflecting largely the increased mortality from the cardiovascular diseases occasioned by the influenza outbreak—whereas the total death rate in 1918 was 29 percent in excess of that in 1917.

It is instructive to view the current epidemic in the light of the long-term trend of mortality from pneumonia and influenza. The chart on page 8 shows for each

DEATH RATES PER 100,000 FROM PNEUMONIA AND INFLUENZA
By Month (Annual Basis), September 1920—November 1957
Industrial Policyholders, Metropolitan Life Insurance Company



year since 1920 the monthly death rate from these causes among the Industrial policyholders of the Metropolitan Life Insurance Company. While pneumonia accounts for the greater part of the aggregate, the sharp peaks mark outbreaks of influenza. During the decade of the 1920's there were four monthly peaks in which the mortality from pneumonia and influenza exceeded 200 per 100,000 policyholders, the rate reaching 411 in January 1929. In each successive decade the peaks became progressively lower; even though the death rate from pneumonia and influenza among the Industrial policyholders rose to about 50 per 100,000 in the autumn of 1957, this rate is overshadowed by the peaks recorded in earlier decades.

Although there is the possibility that a second wave of influenza may sweep the country, the prospects of keeping it in check are good. Barring unforeseen changes in the type of virus involved, the incidence of the disease may be reduced by wider use of the vaccine which has been developed. Furthermore, the dangerous respiratory complications that account for a large proportion of the deaths among influenza victims can be combated in a large proportion of cases by antibiotics and chemotherapy, even though no specific treatment is available for influenza itself.

Incidence of Infectious Hepatitis Decreasing

THE reported incidence of infectious hepatitis in the United States has been decreasing for three successive years, as is shown in Table 1. In 1954, more than 50,000 cases of the disease were reported; the total in 1957 is estimated at less than one third that number. Just prior to this decline, however, reported cases rose abruptly—from less than 17,500 in 1952 to nearly three times that figure two years later.

TABLE 1—INFECTIOUS HEPATITIS
Reported Cases and Deaths
United States, 1952-1957

Year	Number Reported	
	Cases*	Deaths
1952	17,428	794
1953	33,700	821
1954	50,093	821
1955	31,961	841
1956	19,234	‡
1957	15,000†	‡

*Includes serum hepatitis
†Estimated
‡Not available
Source: National Office of Vital Statistics

Unlike the wide fluctuations which have occurred in the reported incidence of infectious hepatitis, the mortality from the disease has remained stable. The number of deaths has varied so little in the period 1952-55 that the death rate from the disease has remained at 0.5 per 100,000 popu-

TABLE 2—INFECTIOUS HEPATITIS*
Reported Cases per 100,000 Population
By Region, 1952-1956

Area	Case Rates per 100,000		
	1956	1954	1952
United States	11.5	31.1	11.2
New England	12.4	33.9	10.0
Middle Atlantic	12.3	32.7	5.4
East North Central	8.7	20.3	4.7
West North Central	10.3	53.8	14.5
South Atlantic	5.1	29.6	23.0
East South Central	14.5	33.0	31.6
West South Central	8.6	20.8	3.1
Mountain	27.0	47.1	10.9
Pacific	19.8	32.5	9.4

*Includes serum hepatitis
Source: National Office of Vital Statistics

●

lation. One likely explanation for the divergence in morbidity and mortality trends is that the sharp rise in reported cases was in large measure an artifact, reflecting the increasing completeness of reporting; nationwide reporting of the disease began in 1952. It is expected that when the national mortality figures for 1956 and 1957 become available, they will show a decrease.

The geographic variations in the trend of infectious hepatitis cases provide further evidence that the rise between 1952 and 1954 was largely spurious. As may be seen in Table 2, each geographic region of the country recorded an increase in cases in this period, but the rise ranged from 4 percent in the East South Central States to more than 570 percent in the West South Central States. In general, the areas with the lowest case rates in 1952 showed the largest increases. The downward trend in cases since 1954, on the other hand, varied only moderately from one region to another.

In 1956, the reported cases of infectious hepatitis varied from 5.1 per 100,000 population in the South Atlantic States to 27.0 in the Mountain States. The areas with the next highest case rates were the Pacific States (19.8 per 100,000) and the East South Central States (14.5).

Infectious hepatitis constitutes a serious public health problem. Even now, the number of cases reported probably falls far short of the actual incidence, because in many instances symptoms may be too general or too mild to be identified. There are still no immunization procedures to prevent outbreaks of the disease and no specific methods of treatment. To bring infectious hepatitis under effective control will require much additional information regarding its diagnosis, prevention, and treatment.

MORTALITY FROM SELECTED CAUSES

Industrial Policyholders, Metropolitan Life Insurance Company

November 1957

Cause of Death	Annual Rate per 100,000 Policyholders*				
	November		Year to Date		
	1957†	1956	1957†	1956	1955
All Causes	731.9	596.7	653.0	619.6	626.5
Tuberculosis (all forms)	6.6	6.4	6.8	7.2	8.1
Communicable diseases of childhood	.2	.2	.2	.3	.3
Acute poliomyelitis	.3	.5	.1	.4	.7
Malignant neoplasms	135.9	124.4	136.3	129.1	129.4
Digestive system	44.3	44.7	47.1	44.4	45.7
Respiratory system	19.7	17.7	18.9	17.5	16.6
Diabetes mellitus	16.4	13.7	15.1	15.1	14.9
Diseases of the cardiovascular-renal system	382.8	312.5	346.0	330.4	331.0
Vascular lesions, central nervous system	68.3	56.9	66.0	63.7	64.9
Diseases of heart	286.9	232.1	254.5	242.0	241.5
Chronic rheumatic heart disease	15.0	13.4	11.6	11.8	12.2
Arteriosclerotic and degenerative heart disease	223.3	177.9	199.1	188.1	186.6
Diseases of coronary arteries	125.0	104.3	113.1	108.4	108.2
Hypertension with heart disease	35.4	31.2	33.5	33.6	34.4
Other diseases of heart	13.2	9.6	10.4	8.6	8.3
Nephritis and nephrosis	10.8	7.4	8.2	7.7	8.4
Pneumonia and influenza	50.8	14.4	18.9	13.9	14.2
Complications of pregnancy, childbirth	1.3	1.0	.9	.9	1.0
Suicide	4.8	4.8	5.7	5.6	6.0
Homicide	2.6	2.6	2.9	2.4	2.1
Accidents—total	31.6	35.5	34.9	35.6	36.8
Motor vehicle	14.6	16.9	15.1	15.6	15.2
All other causes	98.6	80.7	85.2	78.7	82.0

*The death rates prior to March 1956 relate to persons insured under Industrial premium-paying policies and persons with Ordinary Monthly Premium Policies for Less Than $1,000; beginning with March 1956, included also are persons with Debit Book Ordinary policies for $2,000 or less.

†The death rates for 1957 are provisional.

●

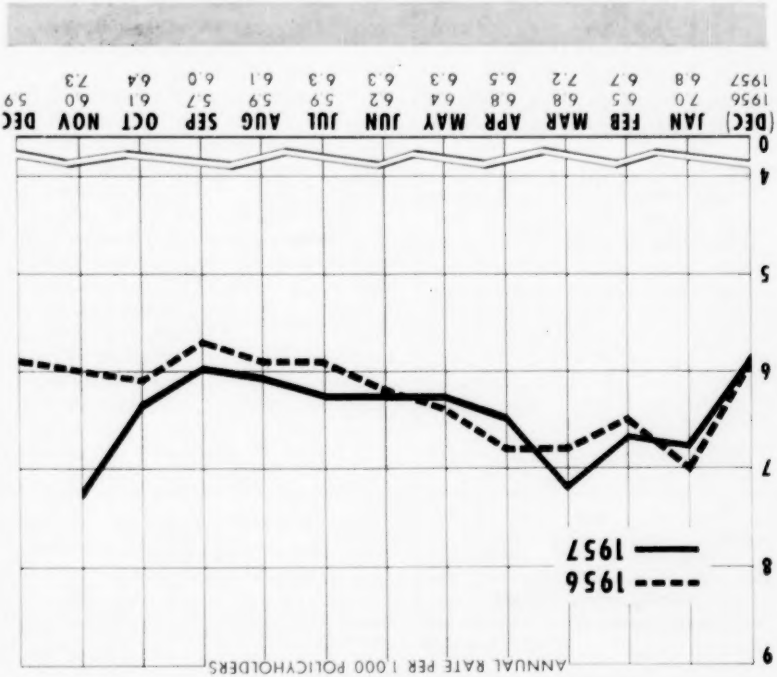
Correspondence relating to the BULLETIN may be addressed to:
The Editor
STATISTICAL BULLETIN
Metropolitan Life Insurance Company
1 Madison Avenue, New York 10, N. Y.

STATISTICAL BULLETIN
1 Madison Avenue, New York 10, N. Y.
Return Postage Guaranteed

Bulk Rate
U. S. POSTAGE
Paid
Long Island City, N. Y.
Permit No. 7

Mr. Eugene B. Power
University Microfilms
313 N. First Street
Ann Arbor, Michigan S22

P.F.M.—Printed in U.S.A.—47603—(12-57)



MORTALITY FROM ALL CAUSES

INDUSTRIAL POLICYHOLDERS · METROPOLITAN LIFE INSURANCE COMPANY